



Facet
Filtration Group®



DIESEL FILTRATION SOLUTIONS

Making the world safer,
healthier and more productive



From the refinery to your vehicle

The key factors to increase the life of your fuel systems are removal of water and debris from the fuel. Major manufacturers of diesel powered equipment are requiring the fuel to meet an ISO standard of 16/13/11 and in this case, less is better.

Facet Diesel Filtration products can help you meet these requirements with cost effective solutions for cleaning your diesel fuel supply. Our experience provides a wealth of knowledge in all types of filtration applications. Discover our line of diesel fuel filtration which ensures clean, dry fuel in every step of the way.

Filtration Equipment Selection

Model M & VCS housings work in combination to remove solid contaminants and water from fuel. These models can handle flow rates of 100 gpm and higher making them an ideal solution for large volume bulk storage systems.

The SuperFlex™ housing is a great choice for flow rates from 30 to 100 gpm. It is an economical, small footprint housing which depending on the cartridge used, can be used as a microfilter or a filter water separator.

For applications where fuel is directly pumped into the equipment, the Fuel-Gard® VF-21SB/22SB can be directly connected in-line for flow rates up to 30 gpm. If no pump and motor are available at

site, the Portable Fuel Filtration Unit is an option. The unit comes complete with a VF-21SB housing, fueling nozzle and pump/motor combination to provide a complete packaged unit that can be easily transported.

Flow Rate	Equipment
30 gpm	<ul style="list-style-type: none"> In-Line Fuel-Gard® models VF-21SB / 22SB Portable Fuel Filtration Unit
30 - 100 gpm	<ul style="list-style-type: none"> SuperFlex™
≥ 100 gpm	<ul style="list-style-type: none"> Microfilter model M Filter water separator Model VCS

ISO Codes and what they mean to you.

The International Organization for Standardization has developed a common test method ISO 4406 for coding the level of contamination by solid particles. It is being used by both engine and fuel system manufacturers to determine the acceptable cleanliness level of the fuel.

ISO 4406 uses a series of three numbers divided by slashes to correlate to a range of particle counts per 1 mL of fluid at three specific micron sizes (4, 6 and 14).

Code	Particles/mL	
	More Than	Up To
23	40,000	80,000
22	20,000	40,000
21	10,000	20,000
20	5,000	10,000
19	2,500	5,000
18	1,300	2,500
17	640	1,300
4 µm	16	320
	15	160
	14	80
6 µm	13	40
	12	20
14 µm	11	10

Fuel Quality	Code Breakdown
Typical Fuel Supply ISO 4406 code: 21/19/17 (unacceptable cleanliness level)	21= 10,000 to 20,000 particles/mL Size 4 µm & larger 19= 2,500 to 5,000 particles/mL Size 6 µm & larger 17= 640 to 1,300 particles/mL Size 14 µm & larger
Recommended Fuel Supply ISO 4406 code: 16/13/11 (acceptable cleanliness level)	16= 320 to 640 particles/mL Size 4 µm & larger 13= 40 to 80 particles/mL Size 6 µm & larger 11= 10 to 20 particles/mL Size 14 µm & larger

Improve and extend injector life and lower maintenance cost

As today's diesel engines become more advanced, it is critical to keep the diesel fuel supply to the engine as free from debris and water contamination as possible.

Poor diesel fuel filtration can cause damage to fuel injectors and fuel pumps and result in engine failures and down-time. Install Facet equipment and extend injectors life.



MICROFILTERS

- ASME code carbon steel
- Remove solid contaminant
- Thermal pressure relief valve
- Direct reading differential pressure gauge
- Automatic air eliminator & manual vent valve
- Manual drain valve



FILTER WATER SEPARATORS

- ASME Code carbon steel
- Coalesces and removes water
- Thermal pressure relief valve
- Liquid level gauge
- Direct reading differential pressure gauge
- Automatic air eliminator & manual vent valve
- Manual drain valve



SUPERFLEX™

- Versatile (prefilter, coalescer or monitor)
- Economical
- Thermal pressure relief valve
- Liquid level gauge
- Direct reading differential pressure gauge
- Automatic air eliminator & manual vent valve
- Manual drain valve



FUEL-GARD® VF-21SB/22SB

- Versatile
- Prefilter, coalescer or monitor
- Light weight
- 10 bar design pressure
- Water sight glass
- Swing bolt quick opening closure



HIGH FLOW ELEMENTS AND VESSELS

HF high flow single and multiple cartridge filter housings can be constructed in either a horizontal or vertical orientation depending on the availability of space.

The HF Series filter cartridges are high efficiency elements specifically designed for the removal of solid contaminant in critical applications.

- Standard Micron Rating: 5µ at 99.98% efficiency
- Recommended Change-out DP: 35 psid
- Maximum temperature: 180 °F
- Flow Direction: Inside to Out
- Configuration: Single open end
- Length: 40.5 inches
- Outside Diameter: 6.3 inches
- Inside Diameter: 2.9 inches



PACKAGED FILTRATION SYSTEMS

- Facet M, VCS or SuperFlex™ combined housings to meet with your performance requirements
- Maximum performance
- Available from 50 gpm flow rates
- Pilot float control that manages automatic water drain and/or discharge control valve
- Inlet/outlet manual valves to isolate system during change-outs



PORTABLE FUEL FILTRATION UNIT

- For use when no pump or motor are available at site
- Fuel nozzle, pump/motor combination and Fuel-Gard® VF-21SB filter housing
- Can operate on 12 VDC (20 gpm) or 120 VAC (15 gpm) power
- VF-21SB housing contains a single cartridge with simple replacement
- Low cost design
- Performance requirements achieved in a single pass
- Easily transported from one job to the next



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